## (19) World Intellectual Property Organization

International Bureau





### (43) International Publication Date 4 August 2005 (04.08.2005)

#### **PCT**

# (10) International Publication Number WO 2005/071903 A1

(51) International Patent Classification<sup>7</sup>: 29/06

H04L 12/56,

(21) International Application Number:

PCT/SE2004/000073

(22) International Filing Date: 22 January 2004 (22.01.2004)

(25) Filing Language:

English

(26) Publication Language:

English

- (71) Applicant (for all designated States except US): TELE-FONAKTIEBOLAGET LM ERICSSON (PUBL) [SE/SE]; S-164 83 Stockholm (SE).
- (72) Inventor; and
- (75) Inventor/Applicant (for US only): ENGSTRAND, Rolf; Sätragårdsvägen 213, S-127 36 Skärholmen (SE).
- (74) Agent: SVENSSON, Lena; c/o Ericsson Ab, Patent Unit Core Networks, Älvsjö, S-125 25 Älvsjö (SE).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM,

AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

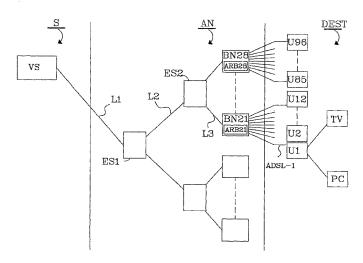
(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

#### **Published:**

with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: ACCESS CONTROL FOR MULTICAST CHANNEL REQUEST



(57) Abstract: The present invention relates to methods and arrangements for access control in a multicast system when data is distributed from a source VS on a common link L3 to at least two users U1-U12 via a node BN21 that comprises a request arbiter ARB21. The arbiter is arranged to distribute the data from source to the users. The method comprises the following steps: - A weight is assigned to each user U1-U12 associated with the node BN21. The weights determine each user's allowed bandwidth i.e. bandwidth allowed to use out of available bandwidth on the common link L3. - A request to join a multicast session  $S_{81}$  is received to the node BN21 from a user U1. - Actual bandwidth usage by the user U1 calculated as the sum of the user's bandwidth part of each used session on the common link L3 including the new request, is compared in the node BN21 with the users U1 allowed bandwidth. - The request denied if the available bandwidth is lower than the actual bandwidth.



